

## FIELD CONTROL IN PERMANENT MAGNET MACHINE

### ABSTRACT OF THE DISCLOSURE

A multi-pole rotor of an electric machine includes ferromagnetic pole segments each extending from an inner surface of the rotor to an outer surface of the rotor, slots separating each of said ferromagnetic pole segments, each of said slots extending from the inner surface of the rotor to the outer surface of the rotor, and each of said slots also having a width varying along a direction from the inner surface of the rotor to the outer surface of the rotor, and a magnet structure constructed and arranged within each of said slots such that said magnet structure also has a width varying along the direction from the inner surface of the rotor to the outer surface of the rotor.